

REPORT

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THIS IS UNEVALUATED INFORMATION FOR THE RESEARCH  
USE OF TRAINED INTELLIGENCE ANALYSTS

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1. The Riga Sarkandaugava Glass Factory is controlled by the Ministry for the Building Materials Industry of the Latvian SSR (Minister - Aushkap). It existed before the war and produced window panes for the requirements of the Latvian Republic. The Germans did not destroy the factory in 1944 when they left Riga. Soon thereafter the factory resumed production of window panes with modernized Fourcault machines. In 1945, the factory was producing 100-115,000 sq. meters of window panes per month. During 1947, the factory received numerous visits from delegations and specialists from various glass factories of the USSR, as well as from scientific institutions working on the production of building materials, such as the Scientific Research Institute for Glass Production.
2. a. At the end of 1946, the factory attained exceptionally high speeds of drawing thin window glass on Fourcault machines, viz. 115-120 linear meters per hour. During the whole of 1947, the factory worked at this high speed and considerably exceeded the factory output program. At the end of 1947, the factory had already fulfilled the program for 1948. The quality of glass remained very high and suffered in no way from this high production rate. In February 1947, the factory was awarded the Challenge Banner (Perekhodyashchec Znarya) by the Council of Ministers of the USSR, the highest reward in the All-Union Socialist Competition. The main reason for the high speeds attained by the factory in drawing glass lies in the alumo-magnesian composition of glass; in addition, the factory has worked out certain technical measures for cooling the moving glass ribbon, and for cooling the glass mass coming out from the slot. The factory produces window glass of varying thickness: thin - 1.8 mm; medium or double - 3 mm. and 3.4 mm; and thick - 6 mm.
- b. The factory cuts the glass in various sizes. There are 32 basic sizes; the length of all is 160 cm, and the width alters by 2 cm. In addition, there are 40 other supplementary sizes, and greenhouse glass of two dimensions.
- c. In 1947, the average annual speed of glass drawing on Fourcault machines was as follows:

Thin glass	110	meters	per	hour;
Double glass	80	"	"	" ;
Thick glass	45	"	"	" ;

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The total quantity produced in 1947 was about 2,450,000 sq. meters.

3. In April 1948, the factory employed 424 men, of whom 373 men were industrial personnel (298 workmen, 26 employees, 34 engineering and technical personnel, and 11 junior ancillary personnel). The director of the factory is Kozlov. There are also a large number of highly qualified specialists such as the chief engineer, P.A. Cherednichenko; the chief of the tank furnace and machinery works, Zh. P. Zimach; master Fourcault machine operators Manavir, Kasparovich, Tereikis, Kidzhius; glass cutters Khardvil, Sprogis, Kalhman; glass grinders Udis, Vilnus, and many others. In 1947, the factory worked 322 twenty-four hour periods.
4. a. The factory produces glass by the Fourcault process. There is a Simplex furnace with a melting surface of 65.34 sq. meters (12.1 x 5.4) and a depth of 1.2 meters. The melting compartment is connected by a channel to the cooling compartment, the dimensions of which are 6 x 2.65 meters. The furnace is heated by producer gas generated in ordinary Siemens producers. The gas station has six producers. The furnace has three pairs of burners in the melting compartment and one pair of burners in the cooling compartment. Three Fourcault machines are on the channel of the furnace, of which two have a width of 1.25 meters and one of 1.6 meters.
- b. The factory is supplied with electric power from the Riga power station, but has its own reserve electric power plant with two internal combustion engines. In addition, the factory also has an accumulator installation which is able to supply current to the Fourcault machines for 72 hours in the case of a stoppage of supply from the Riga power station.
5. a. The factory employs the following composition of soda charge (by weight):
 

Sand	100
Soda	37
Limestone	27
Sulphate with admixture of charcoal	3.5
- b. Sand is received from sandpits situated near Riga and its chemical composition is as follows:
 

SiO <sub>2</sub>	98.3%
Al <sub>2</sub> O <sub>3</sub>	1.12%
Fe <sub>2</sub> O <sub>3</sub>	0.11%
TiO <sub>2</sub>	0.03%
Other substances	0.43%
- c. Limestone is received from the Tsessinski (Tsesis or Cesis) Lime Works of the Ministry for the Building Materials Industry of the Latvian SSR. This factory is situated 75 km. from Riga. The chemical composition of limestone is as follows:

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CaO	54.5%
MgO	1.01%
SiO <sub>2</sub>	2.32%
Fe <sub>2</sub> O <sub>3</sub>	0.03%
CO <sub>2</sub>	41.6%

- d. Sulphate is received at the factory from the Aralsulfat Combine but is specially prepared at the factory. Soda is normal standard type. To insure supply of refractories, the factory has a special ceramic shop (keramicheskii tsekh), producing firebricks.
- e. Fireproof material called mulit (?) is received from Trans-Caucasia.
- f. Coal for the gas plant is brought from Silesia by ships. The estimated consumption of coal per 24 hours is 25-30 tons.

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